UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

FEBRUARY 1967

PART II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

CONTENTS

Page

Sea Surface Temperature Charts, Eastern Pacific Ocean, February 1967 1

Bureau of Commercial Fisheries
Tuna Resources Laboratory
P. O. Box 271
La Jolla, California 92038

*Part 1 - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, Post Office Building, San Pedro, California

SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN

FEBRUARY 1967

Acknowledgements

The following organizations and stations contributed data for the February 1967 charts:

U.S. Bureau of Commercial Fisheries Exploratory Fishing and Gear Research Base, Seattle, Washington
U.S. Bureau of Commercial Fisheries Biological Laboratories La Jolla, California; Honolulu, Hawaii; and Seattle, Washington
U.S. Coast Guard Cutter Rockaway
U.S. Coast Guard Air Station, San Diego, California
U.S. Naval Communication Station Balboa, Fort Amador, Canal Zone
U.S. Naval Weather Service, Fleet Numerical Weather Facility, Monterey, California
Environmental Science Services Administration
U.S. Weather Bureau, San Diego, California
U.S. Weather Bureau Forecast Center, Los Angeles, California
Hopkins Marine Station, Pacific Grove, California by J. P. Balesteri
Inter-American Geodetic Survey by David Ortega at Manzanillo, Mexico; R. Peren at Pt. Armuelles, Panama; V. E. Castillo at Tumaco, Colombia; S. Valenzuela at La Libertad, Eduador; E. Guerrero, M. Chevez and L. Meza at Talara, Peru; J. Cardenas and Juan Andia at San Juan, Peru
Inter-American Tropical Tuna Commission, La Jolla and Terminal Island, California
Kelco Company, San Diego, California
Oregon State University, Department of Oceanography, Corvallis, Oregon R/V Yaquina
Pacific Oceanographic Group, Nanaimo, British Columbia, by H. J. Hollister from observations by T. Collins at Quatsino Lightstation; P. B. Robertson at Cape St. James Light; O. A. Edwards at Amphitrite Point Light; G. C. Wilkes at Langara Island Light
Scripps Institution of Oceanography, La Jolla, California by Margaret Robinson and Hans Klein
Texas A & M University, R/V Alaminos
W. R. Grace and Company, New York by Dr. I. William Lane
Ships Californian and Royal Pacific

Charts

Figure 1.--Mean sea surface temperatures (°F) derived from approximately 9000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2.--Deviation of sea surface temperatures (°F) from long term charts of H.O. 225. Hatched areas are colder in 1967.

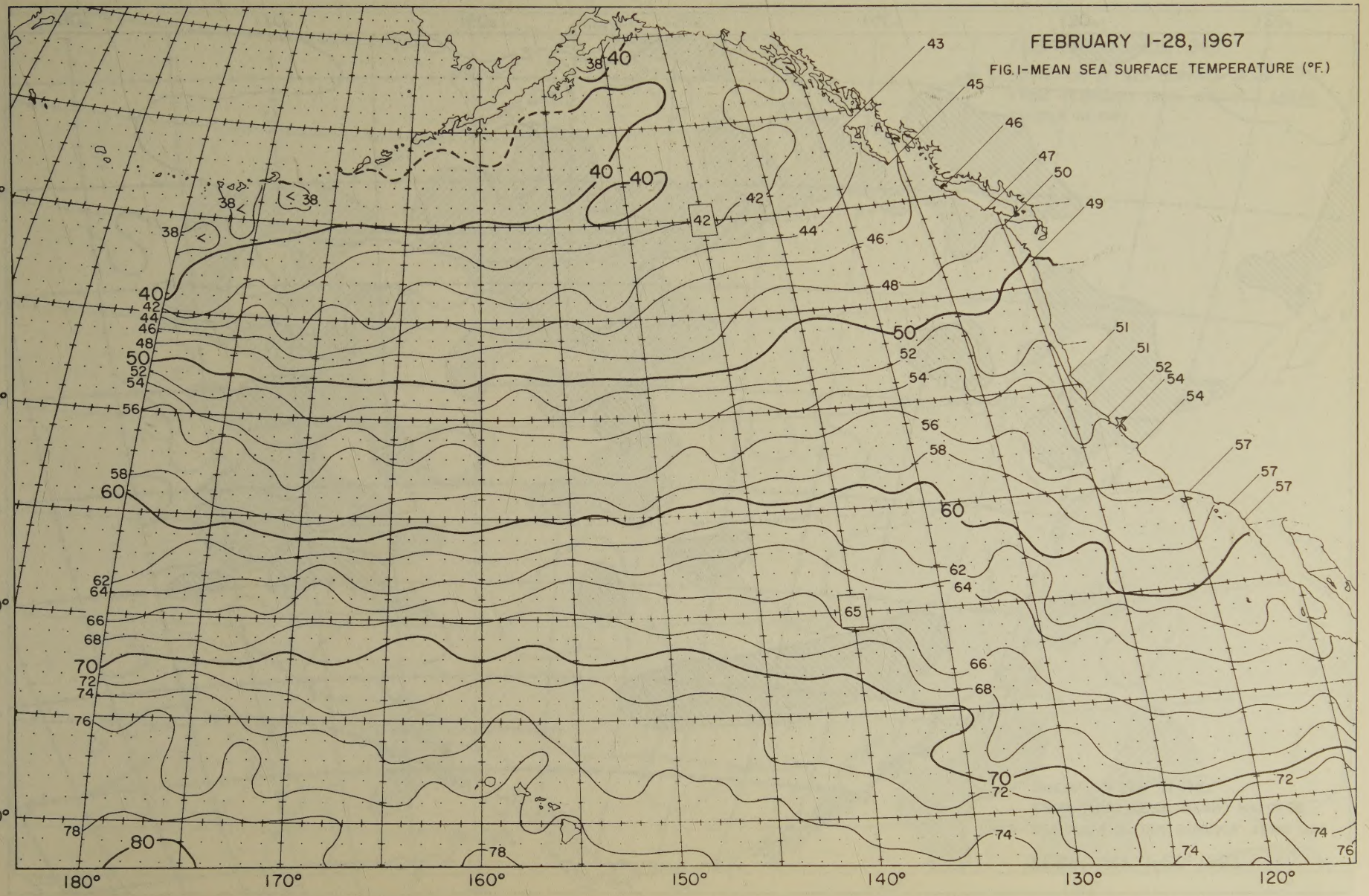
Figure 3.--Deviation of sea surface temperatures (°F) from those of February 1966. Hatched areas are colder in 1967.

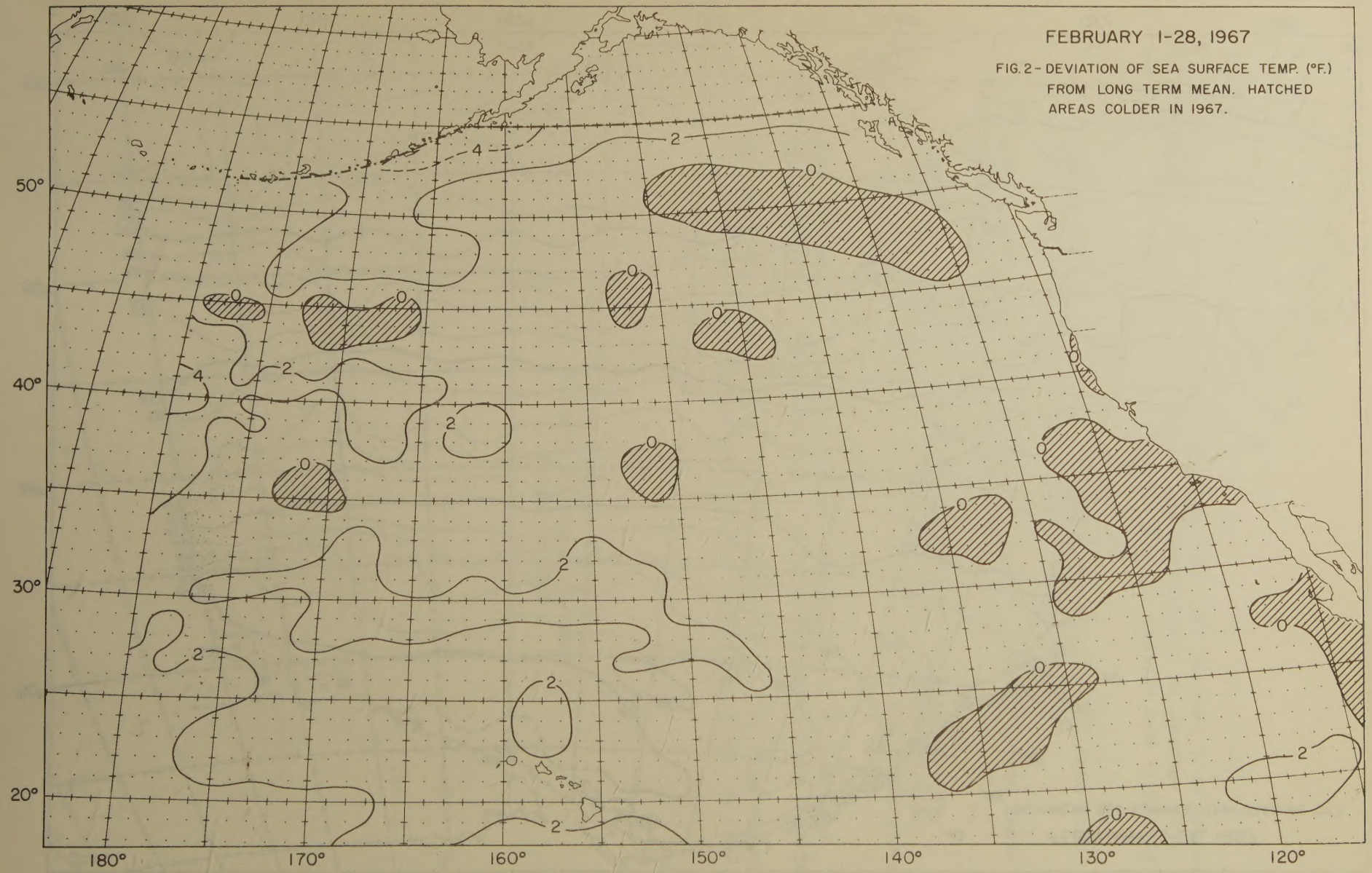
Figure 4.--Sea surface temperatures (°F) by 1-degree squares, approximately 3000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

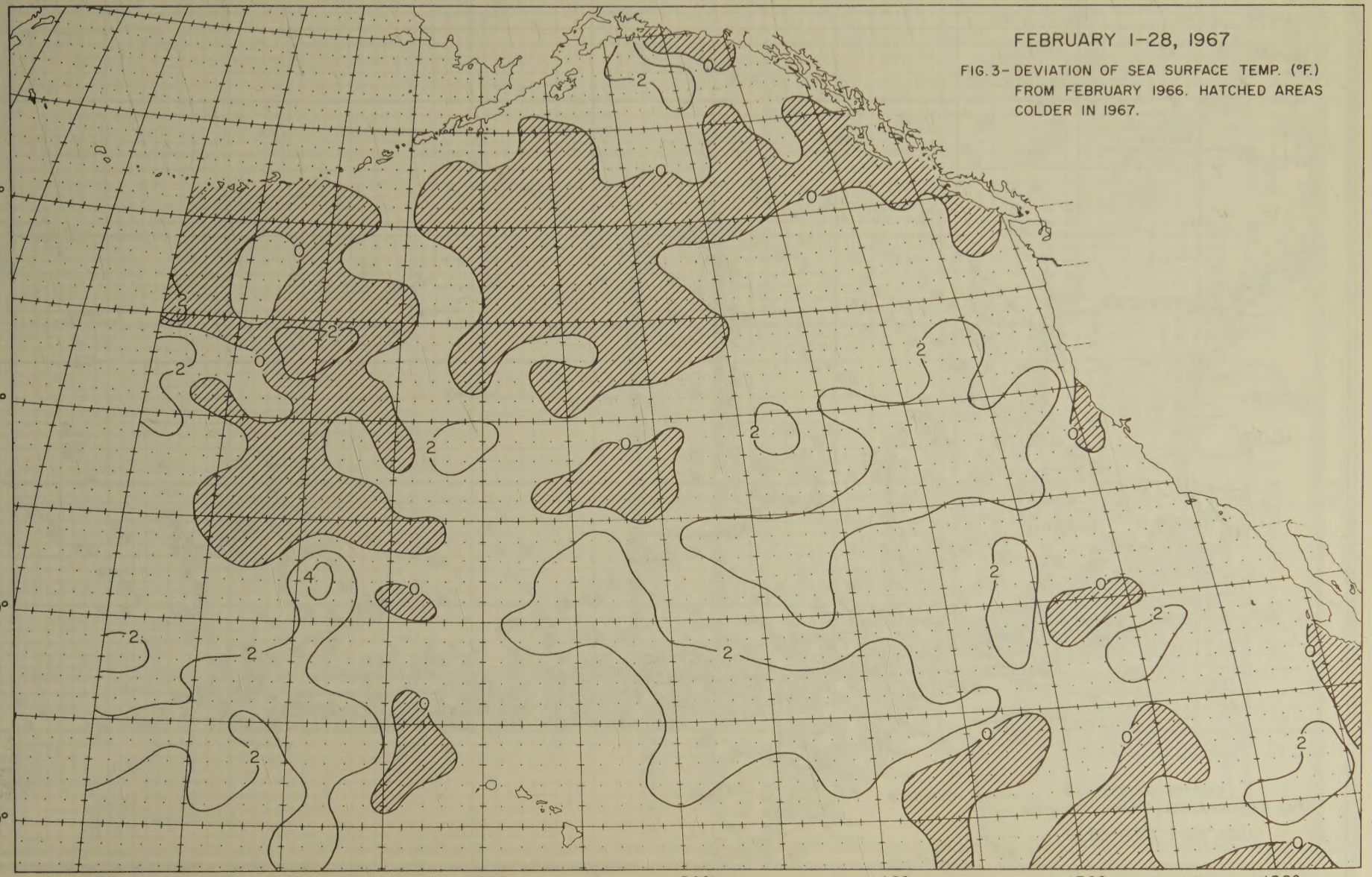
Figure 5.--Deviation of sea surface temperatures (°F) February 1967-February 1966 by 1-degree squares. Shaded areas are colder in 1967.

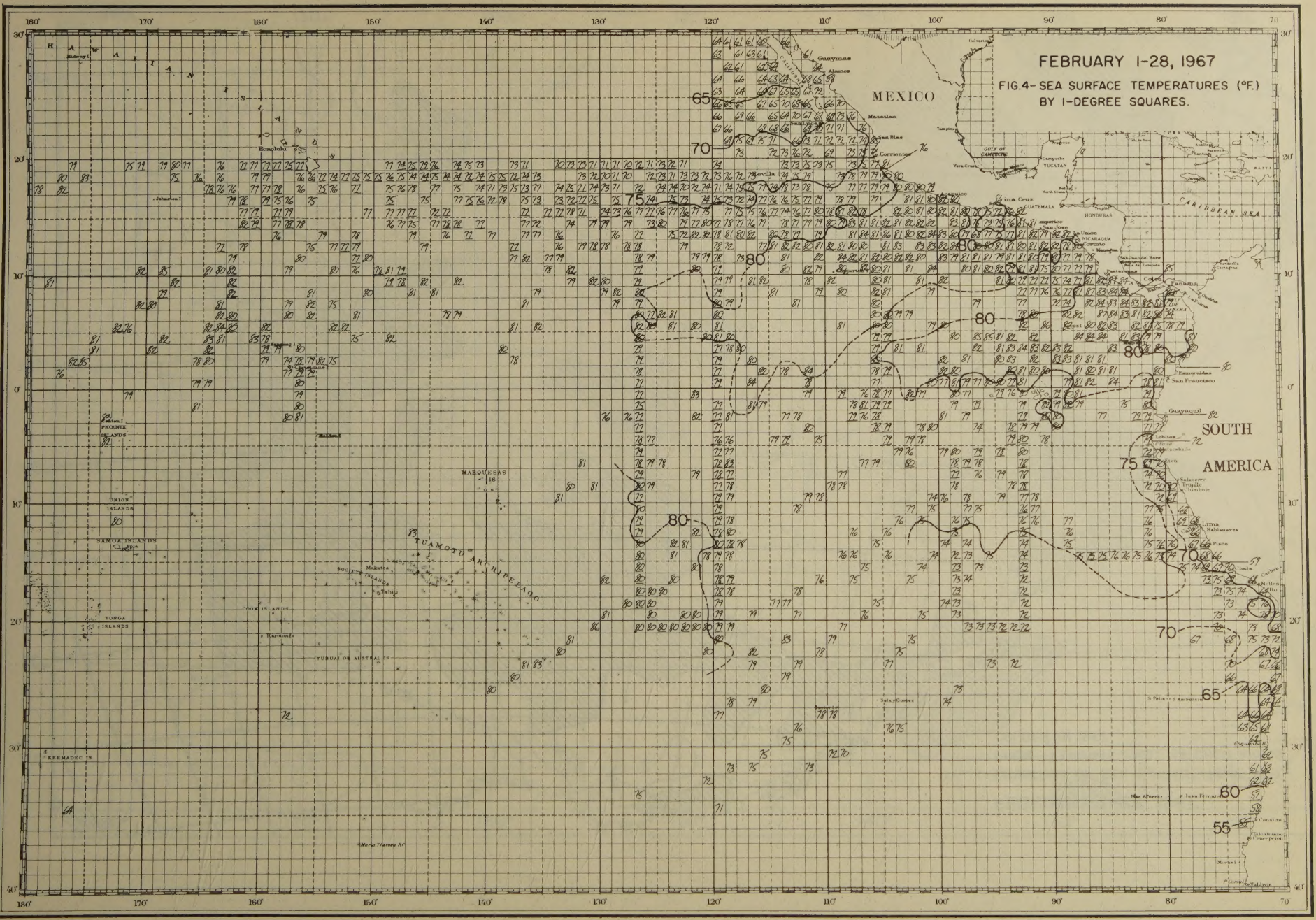
Figure 6.--Deviation of sea surface temperatures (°F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1967.

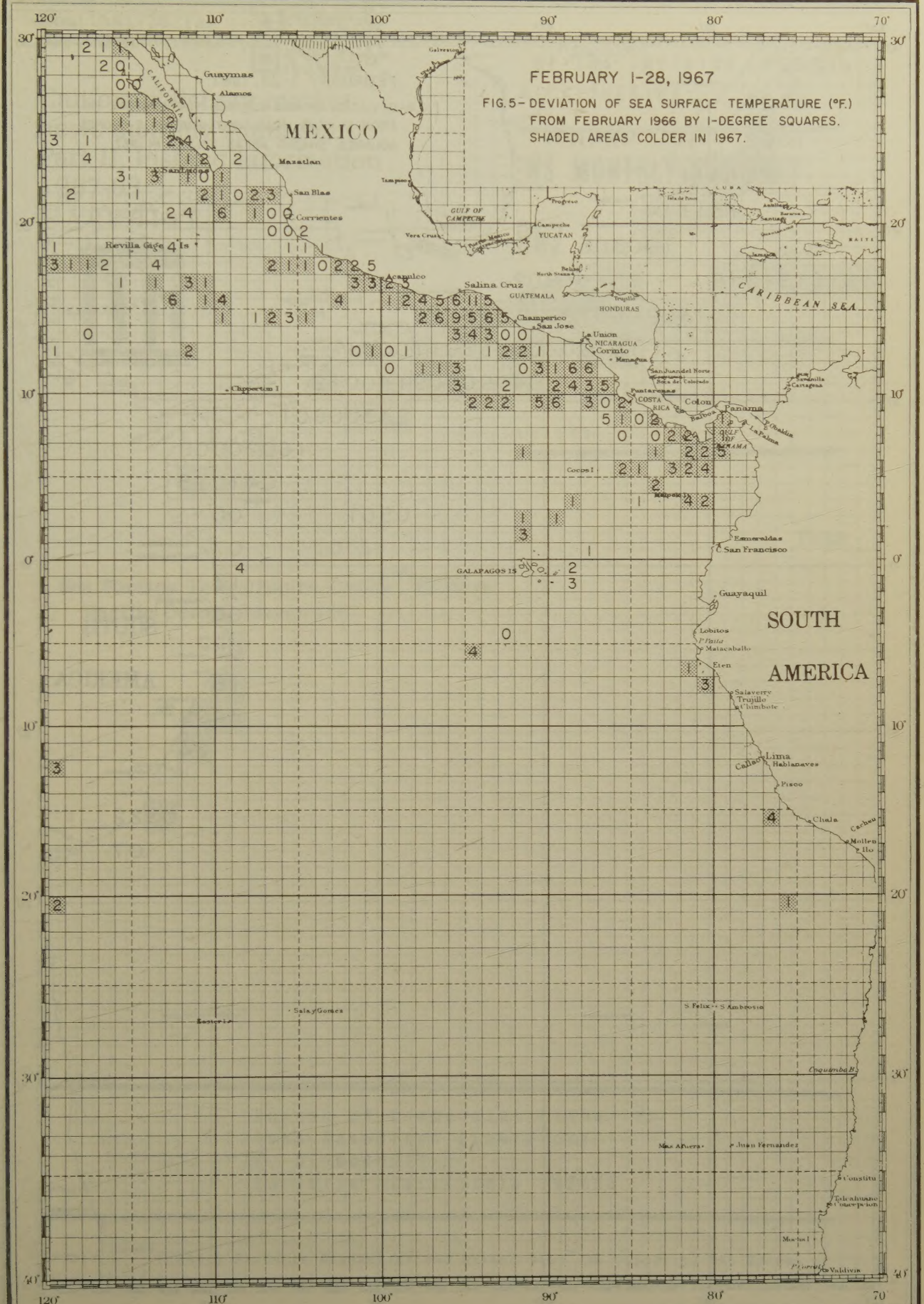
James A. Renner
Fishery Biologist (General)
March 6, 1967

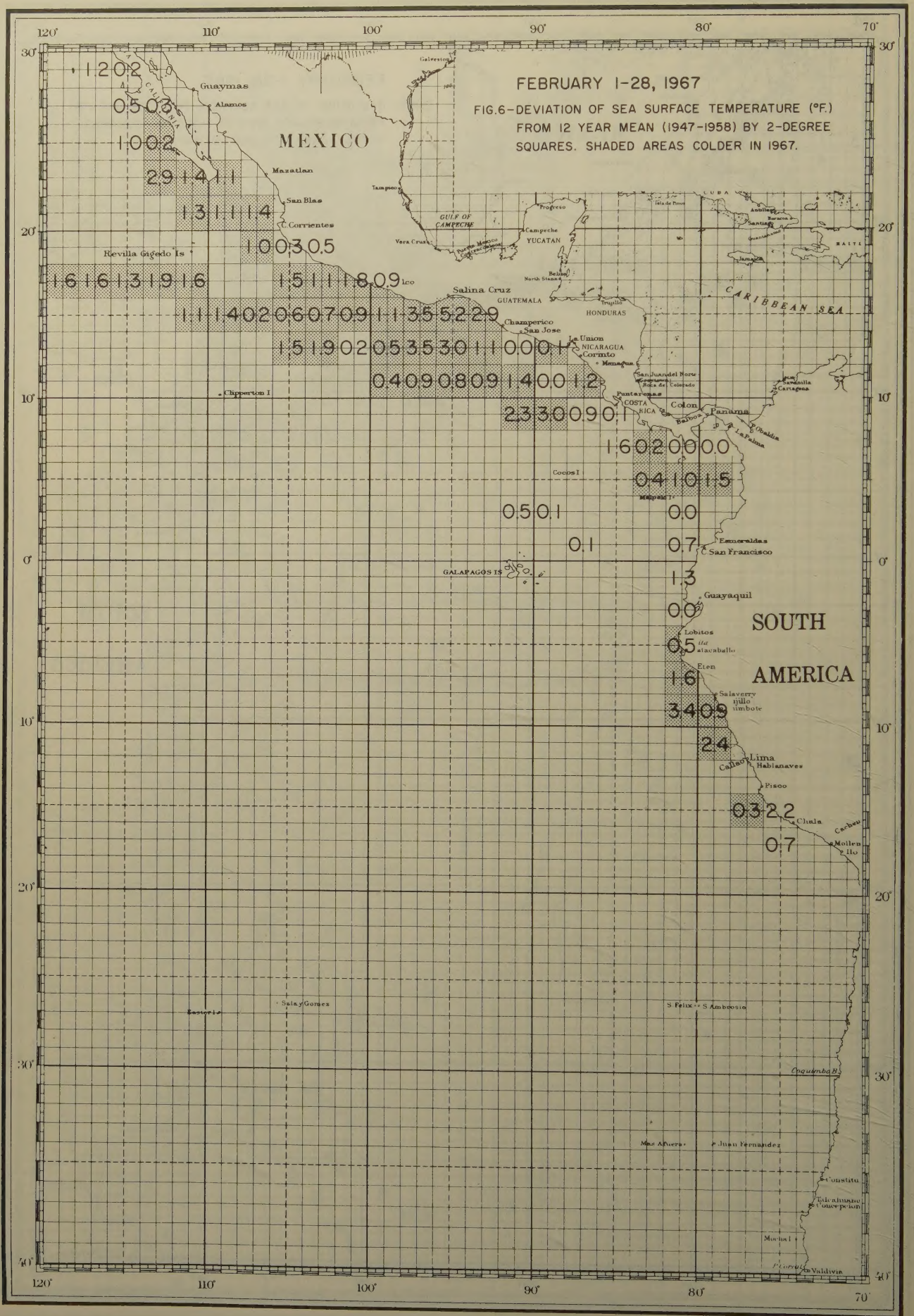

FEBRUARY 1-28, 1967
FIG. 1-MEAN SEA SURFACE TEMPERATURE (°F.)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


FEBRUARY 1-28, 1967
FIG. 2 - DEVIATION OF SEA SURFACE TEMP. (°F.) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1967.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
0
2
4


FEBRUARY 1-28, 1967
FIG. 3- DEVIATION OF SEA SURFACE TEMP. (°F.) FROM FEBRUARY 1966. HATCHED AREAS COLDER IN 1967.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


FEBRUARY 1-28, 1967
FIG.4- SEA SURFACE TEMPERATURES (°F.)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
CARIBBEAN SEA
GULF OF CALIFORNIA
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
PANAMA
YUCATAN
Guaymas
Mazatlan
San Blas
Corrientes
Salina Cruz
Guayaquil
Callao
Lima
Salaverry
Trujillo
Chimbote
Paita
Pisco
San Francisco
Esmeraldas
Buenaventura
Tumaco
Cristobal
Colon
Puerto Armuelles
Puntarenas
Corinto
Acapulco
Manzanillo
Honolulu
HAWAIIAN ISLANDS
PHOENIX ISLANDS
UNION ISLANDS
SAMOA ISLANDS
TONGA ISLANDS
COOK ISLANDS
SOCIETY ISLANDS
TUAMOTU ARCHIPELAGO
MARQUESAS
TUBUAI OR AUSTRAL IS.
KERMADEC IS.
65
70
75
80
60
55


FEBRUARY 1-28, 1967
FIG. 5 - DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM FEBRUARY 1966 BY 1-DEGREE SQUARES. SHADED AREAS COLDER IN 1967.
MEXICO
CALIFORNIA
GULF OF CAMPECHE
YUCATAN
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
PANAMA
CARIBBEAN SEA
CUBA
HAITI
JAMAICA
SOUTH AMERICA
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gige 4 Is
Acapulco
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Punta Arenas
Colon
Balboa
Panama
Esmeraldas
San Francisco
Guayaquil
Lobitos
Malacaballo
Eten
Salaverry
Trujillo
Chimbote
Callao
Lima
Hablanaves
Pisco
Chala
Cachos
Mollendo
Ilo
Arica
Iquique
Antofagasta
Chipperton I
Cocos I
Malpelo I
Progreso
Campeche
Vera Cruz
Tampico
Galveston
Belize
Trujillo
Cartagena
Maracaibo
Aruba
Curacao
Santiago
Kingston
Port au Prince
Isla de Pinos
Bahia
Salas y Gomez
Easter I
S. Felix
S. Ambrosio
Mas Afuera
Juan Fernandez
Constitu
Talcahuano
Concepcion
Mocha I
Valdivia
Chiloe
Chaiten
Corcovado G
Chiloe I
Guaitecas Is
Taitao Pen
Evangelistas
Wellington I
Tres Montes
Penas G
Taitao Pen
Chonos Archipelago
Chonos Archipelago
Chonos Archipelago


FEBRUARY 1-28, 1967
FIG.6-DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1967.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Punta Arenas
Colon
Panama
Balboa
Cocos I
Malpelo I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Eten
Salaverry
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Cachebu
Moilen
Ilo
Sala y Gomez
Easter I
S Felix
S Ambrosio
Juan Fernandez
Mas A Fuera
Constitu
Concepcion
Valdivia
Chiloe I
Tampico
Progreso
Campeche
YUCATAN
Vera Cruz
Galveston
Belize
Trujillo
Cayman Is
Jamaica
HAITI
CUBA
Santiago
Cartagena
Chipperton I